VSR /BBMP/YNK/W.No.003-001/2019-20 **Date: 23/11.2020**

CERTIFICATE

Division: Yelahanka

Sub Division: Yelahanka satellite Town Sub division

Ward No: 003

Job Code No: 003-20-000071

Name of Work: Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division, BBMP, Bangalore.

Running Account Bill: 3rd and Final

Value of work completed by Contractor Amount: Rs 8,49,024.00/-

This is to certify that all the Items of Works have been carried out as per Specifications and Conform to MORTH.

for VSR Civil Infra Pvt. Ltd.

(Authorized Signatory)

Project Management Consultants

AE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 16.10.2020

TEST REPORT

CLIENT	:	Executive Engineer, Yelahanka Division, BBMP, Bengaluru.
AGENCY	:	M/s. Technical Manager (West), KRIDL, Bengaluru
NAME OF THE WORK	:	Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
SAMPLE ID	:	Cement (Ultratech – OPC 53 Grade)
DATE OF MANUFACTURE	:	September - 2020
DATE OF TESTING	:	14.10.2020 to 16.10.2020
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part -5)	135 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	440 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	29.00 %	-

Note:

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⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

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Consultants representative **Contractor representative** **Client Representative**

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Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date 16.10.2020

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West), KRIDL, Bengaluru**

Name of Work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Date of Testing 16.10.2020

Material : Sand

Total wt. of aggregates in gms = **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	52	5.20	5.20	94.8	90-100
2.36	132	13.20	18.40	81.6	75-100
1.18	165	16.50	34.90	65.1	55-90
600 Micron	131	13.10	48.00	52.0	35-59
300 Micron	255	25.50	73.50	26.5	8-30
150 Micron	212	21.20	94.70	5.3	0-10

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ಬ.ಬ.ಪಾ.ಪ. ಬೆಂಗಳೂರು-106

Job No.: CSC/BBMP/KRIDL/W.No.26/2019-20

Date 16.10.2020

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West), KRIDL, Bengaluru**

Name of Work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Date of Testing 16.10.2020

Material : 40mm Aggregates

Total wt. of aggregates in gms = **15000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	415	2.77	2.77	97.23	95-100
20	5265	35.10	37.87	62.13	30-70
10	4854	32.36	70.23	29.77	10-35
4.75	3965	26.43	96.66	3.34	0-5

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ಜ.ಜ.ಎಂ.ಕಿ. ಬೆಂಗಳೂರು-106

Job No. VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 16.10.2020

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West), KRIDL, Bengaluru**

Name of Work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Date of Testing 16.10.2020

Material : 20mm Aggregates

Total wt. of aggregates in gms = **5000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
40	0	0	0	100	100
20	112	2.2	2.2	97.8	95-100
10	2321	46.4	48.7	51.3	25-55
4.75	2254	45.1	93.7	6.3	0-10

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ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-೧೦೬

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 17.10.2020

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client	:	**Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.
Agency	:	**M/s. Technical Manager (West),** KRIDL, Bengaluru
Name of Work	:	Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division, BBMP, Bangalore.
Sample Identification	:	8mm,10mm,12mm Fe 500 TMT Bars
Technical Reference	:	IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)
Date of test	:	17.10.2020

S.No	Brand	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
				0.20 % proof stress/ yield stress (N/mm^2)	Tensile strength (N/mm^2)	Elongation, percent on gauge length
1	Fe 500	8	0.33	538	548	13.5
2	Fe 500	10	0.65	552	561	14
3	Fe 500	12	0.84	565	573	15
4	Fe 500	16	1.56	576	585	15.5

Remarks:

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Consultants representative

Contractor representative

Client Representative

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 18.11.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work :Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division, BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	21.10.2020	18.11.2020	8.232	502.3	22.32
2	21.10.2020	18.11.2020	8.310	516.3	22.95
3	21.10.2020	18.11.2020	8.269	523.7	23.28

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Consultants representative

Contractor representative

Client Representative

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Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 28.10.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work :Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division, BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

SLNo.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	21.10.2020	28.10.2020	8.112	348.2	15.48
2	21.10.2020	28.10.2020	8.152	361.5	16.07
3	21.10.2020	28.10.2020	8.199	356.4	15.84

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VSR GIVIL INFRA P. LTD. BANGALORE

Consultants representative

Contractor representative

Client Representative

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 29.10.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work :Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division, BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	22.10.2020	29.10.2020	8.114	348.2	15.48
2	22.10.2020	29.10.2020	8.135	353.6	15.72
3	22.10.2020	29.10.2020	8.162	361.4	16.06

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V.S.R. CIVIL INFRA PVT. LTD. BANGALORE

Consultants representative

Contractor representative

Client Representative

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ಬ.ಬ.ಪಾ.ಕೆ, ಬೆಂಗಳೂರು-೧೦೬

Job No: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 19.11.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work :Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division, BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

S.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	22.10.2020	19.11.2020	8.265	498.6	22.16
2	22.10.2020	19.11.2020	8.313	507.3	22.55
3	22.10.2020	19.11.2020	8.296	518.3	23.04

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Consultant representative

Contractor representative

Client Representative